EverFocus®

EDH5210B(W)-003

Operation Instruction

EDH5201B

EDH5201W

HDcctv 1080p
Indoor 3-Axis Dome Camera

EDH5210B
EDH5210W

EVERFOCUS ELECTRONICS CORPORATION

Operation Instruction

© 2013 EverFocus Electronics Corp

Please read this manual first for correct installation and operation. This manual should be retained for future reference. The information in this manual was current when published. The manufacturer reserves the right to revise and improve its products. All specifications are therefore subject to change without notice.

All rights reserved. No part of the contents of this manual may be reproduced or transmitted in any form or by any means without written permission of the EverFocus Electronics Corporation.

PRECAUTIONS

1. Do not install the camera near electric or magnetic fields.
   Install the camera away from TV/radio transmitters, magnets, electric motors, transformers and audio speakers since the electromagnetic fields generated from these devices may distort the video image or otherwise interfere with camera operation.

2. Never disassemble the camera beyond the recommendations in this manual nor introduce materials other than those recommended herein. Improper disassembly or introduction of corrosive materials may result in equipment failure or other damage.

3. Try to avoid facing the camera toward the sun. In some circumstances, direct sunlight may cause permanent damage to the sensor and/or internal circuits, as well as creating unbalanced illumination beyond the capability of the camera to compensate.

4. Keep the power cord away from water and other liquids and never touch the power cord with wet hands. Touching a wet power cord with your hands or touching the power cord with wet hands may result in electric shock.

5. Never install the camera in areas exposed to oil, gas or solvents.
   Oil, gas or solvents may result in equipment failure, electric shock or, in extreme cases, fire.

6. Cleaning
   For cameras with interchangeable lenses, do not touch the surface of the sensor directly with the hands. Use lens tissue or a cotton tipped applicator and ethanol to clean the sensor and the camera lens. Use a damp soft cloth to remove any dirt from the camera body. Please do not use complex solvents, corrosive or abrasive agents for cleaning of any part of the camera.

7. Do not operate the camera beyond the specified temperature, humidity or power source ratings.
   This camera is suitable for indoor operation. Use the camera at temperatures within -10°C~50°C (14°F~122°F) and in an indoor environment; this device is not rated as weather proof. The input power source is 12VDC. The use of properly fused or Class 2 power limited type supplies are highly recommended.

8. Mounting
   Use care in selecting a solid mounting surface which will support the weight of the camera plus any wind, snow, ice or other loading, and securely attach the camera to the mounting surface using screws and anchors which will properly support the camera. If necessary (e.g. when mounting to drop ceilings) use a safety wire to provide additional support for the camera.

ATTENTION! This is a class A product which may cause radio interference in a domestic environment; in this case, the user may be urged to take adequate measures.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures :

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the users' authority to operate this equipment.

Table of Contents

1. PRODUCT OVERVIEW 7
1.1 FEATURES 7
1.2 ACCESSORY PARTS LIST 8
1.3 SPECIFICATIONS 9
1.4 DIMENSIONS 10

2. CAMERA COMPONENT DESCRIPTION 11

3. INSTALLATION 12

4. OSD Structure..... 14

Chapter 1

1. Product Overview

The EDH5201 is an HDcctv indoor 3-axis dome camera with Day/Night capability available in your choice of white or black plastic housing to match or contrast with the décor. Based on a 1/2.8" Sony 2.43 megapixel progressive scan sensor and varifocal 3.6~16mm megapixel lens for HD 1080p resolution 100% digital images, it delivers vastly superior video quality compared to traditional CCTV images. This superior resolution not only captures more critical evidentiary information, but the inherent ability for megapixel video also extends the area of coverage, expedites completion of investigations, resolves complaints and reduces both capital and operational costs. Designed with SENS-UP up to 8X low light enhancement technology, the EDH5201 can capture color images in very low light without ghosting, or it can switch to monochrome mode automatically in low light environments.

This highly advanced imaging system also incorporates state of the art optical enhancement technologies: Lens Shading Correction compensates to eliminate artificial shadows caused by attenuation of light as it traverses the outer portions of the lens; Digital Slow Shutter light enhancement technology combines with Digital Noise Reduction (3D DNR) to maximize image clarity while conserving DVR disk storage space; digital WDR to handle challenging lighting conditions; digital zoom with electronic PTZ to fine tune field of view; Highlight Suppression (HSBLC) to handle imbalance due to bright spots in the scene; image flip/rotate, and much more.

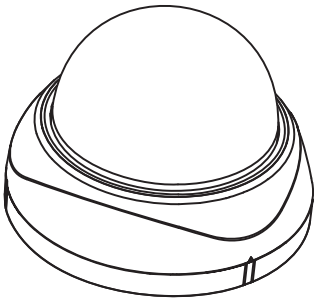
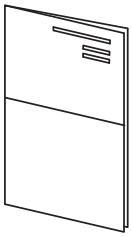
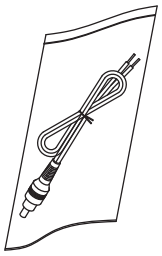
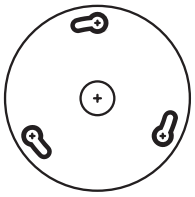
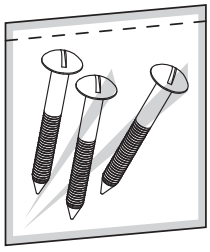
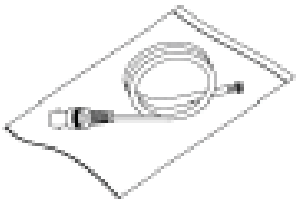
No major upgrade to the IT network is required to deploy this powerful technology; HDcctv cameras communicate at digital speeds up to 1.5Gb/s over existing or new coaxial cable (RG59 or other types for longer distances), using industry standard BNC connectors. With its NTSC/analog secondary output to allow convenient aim and focus using a standard hand held test monitor, full OSD controls, 3-axis positioning and 94° wide horizontal viewing angle megapixel lens the EDH5201 delivers flexible, robust coverage in a wide range of low light surveillance applications while delivering stunning HD image quality.

1.1 Features

- HDcctv 2.1 Megapixel real time 1920x1080/1280x720 HD video over coax for superlative image detail
- Supports video outputs of 1080p30/25 and 720p60/50 (field select)
- Varifocal 3.6~16mm megapixel lens
- Choice of Day/Night operation or Full Color Images in Low Light
- Provides 3-D DNR to improve picture clarity while enabling DVRs to improve disk storage utilization
- 3-Axis Gimbal for Flexible mounting and positioning
- Easy to use OSD setup menu with an array of options
- Enhanced low light sensitivity increase of up to 8x
- Lens Shading Compensation to offset diminished light transmission through lens periphery for uniform image illumination
- Electronic WDR and HSBLC [Highlight Suppression Back Light Compensation] to handle lighting imbalance and bright areas in the scene
- Digital zoom increases effective lens magnification up to 20X
- Up to 24 Privacy Zones
- Dead pixel compensation for increased clarity and extended service life
- SD TV Out for aim and focus using a standard hand held test monitor

1.2 Accessory Parts List

Please be careful when you unpack the box due to the electronics devices inside.
Check and make sure that you have all the items listed below inside the original box:

Camera		Manual	
			
Pigtail Cable(Power)	Mounting Template	Screws	Service Video Cable
			

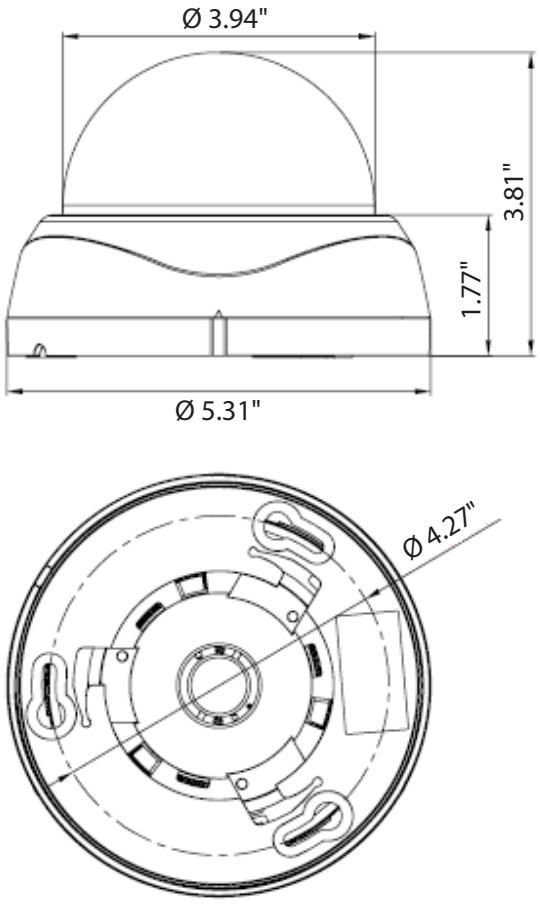
Please Note: If an item appears to have been damaged in shipment, replace it properly in its carton and notify the shipper. If any items are missing, notify your EverFocus Electronics Corp. Sales Representative or Customer Service. The shipping carton is the safest container in which the unit may be transported. Save it for possible future use.

1.3 Specifications

Pickup Device	1/2.8" Sony 2.43 Megapixel Color Progressive CMOS sensor
Image Pixels	1920(H)x1080(V) with 2.8µx 2.8µ pixel size
HDcctv Image Area Dimensions	5.38mm (H) x 3.02 mm(W); ø 6.17 mm area diagonal
Sensitivity	0.1lux/F=1.2 (Sens-Up OFF)
S/N Ratio	More than 50dB
Video Format Main Output	HDcctv
Video Resolution/Mode Main Output	Field select 1080p30/25, 720p60/50
Main Output Connector	BNC-F
Video Format Test Output	NTSC/PAL selectable
Test Output Connector	Pin connector on board; adapter cable to BNC-F supplied
Lens Type	3.6~16mm Megapixel DC Iris Lens
FOV Angle	72°~19° Horizontal
Shutter Speed	Auto/Manual selectable
OSD	Yes (5-axis joystick control)
D/N Mode	Auto, Color, B/W (Electronic D/N)
Exposure Control	Automatic Electronic Shutter
Digital WDR	Weight Level Adjustable 0~4
DSS	Low light boost up to 8X
Lens Shading Compensation	On / Off
HSBLC (Highlight Suppression Back Light Compensation)	Off/On
Auto Gain Control	Variable relative level 0~10
White Balance	ATW / Push / Manual
DNR - 3D	Low / Medium / High
Digital Zoom	1X~20X
Image Flip	Off /V Flip/H flip/H+V flip (rotate)
Programmable Privacy Zones	24 areas independently adjustable for size, location, color
Language	English
Dead Pixel Compensation	Manual Off/On
Power Source & Consumption	DC12V (+/-10%) @ 220mA
Mounting/Positioning	3-Axis gimbal
Dimensions	Body: 95.3mm / 3.75" (Max. H) x Ø136.4mm / Ø5.37" Base Diameter (W)
Weight	343g / 12.1oz
Housing Color	Choice of black or white
Operating Temperature	14°F to 122°F
Operating Humidity	20%~80% humidity, non-condensing

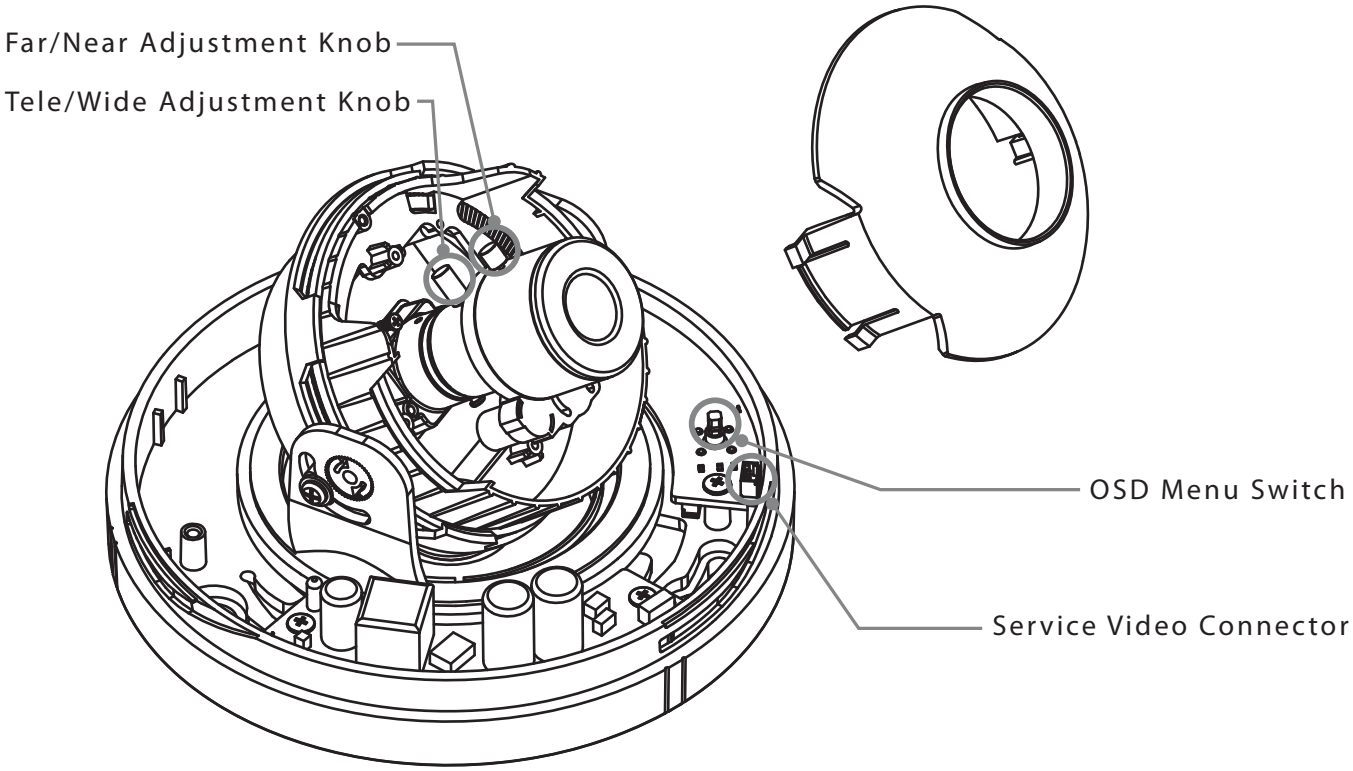
1.4 Dimensions

Inches:

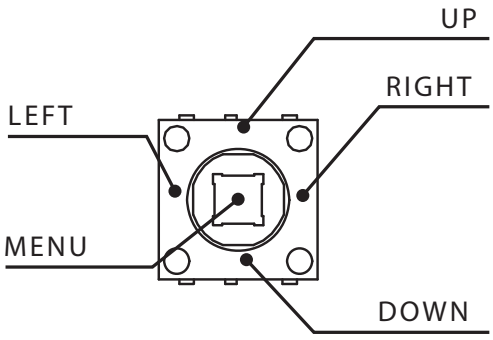


Chapter
2

2. Camera Component Description



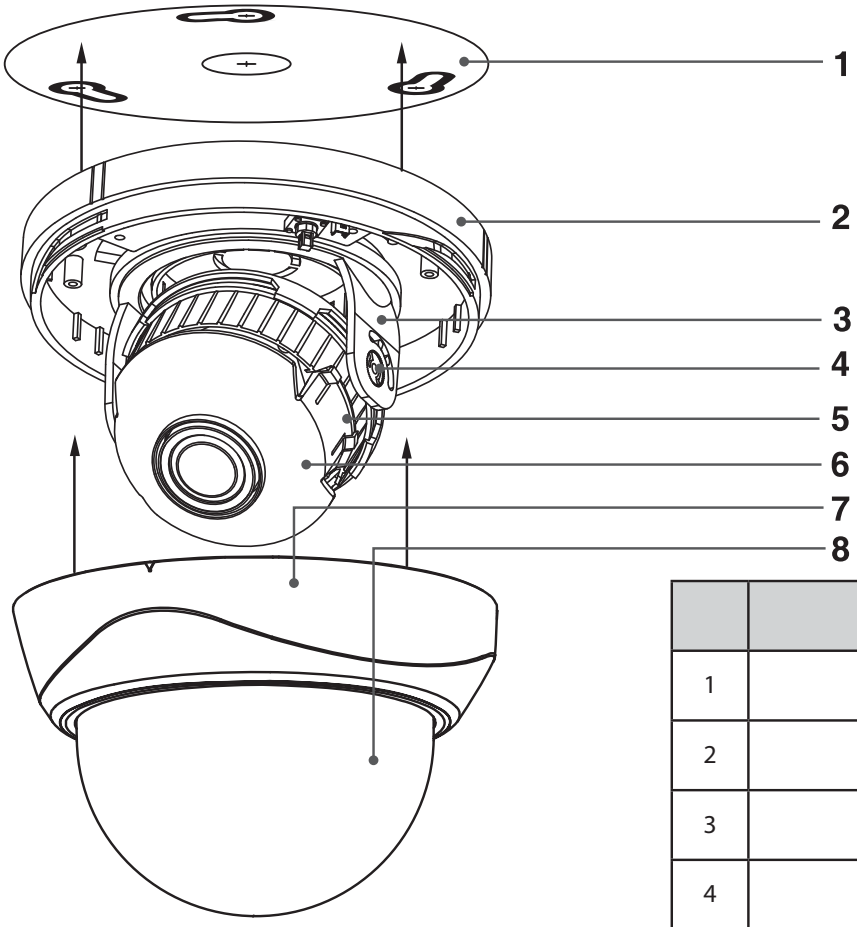
OSD Menu Switch



- UP, DOWN : Menu up / down
- LEFT, RIGHT : Change Values
- MENU : MENU(SELECTION KEY) / Enter

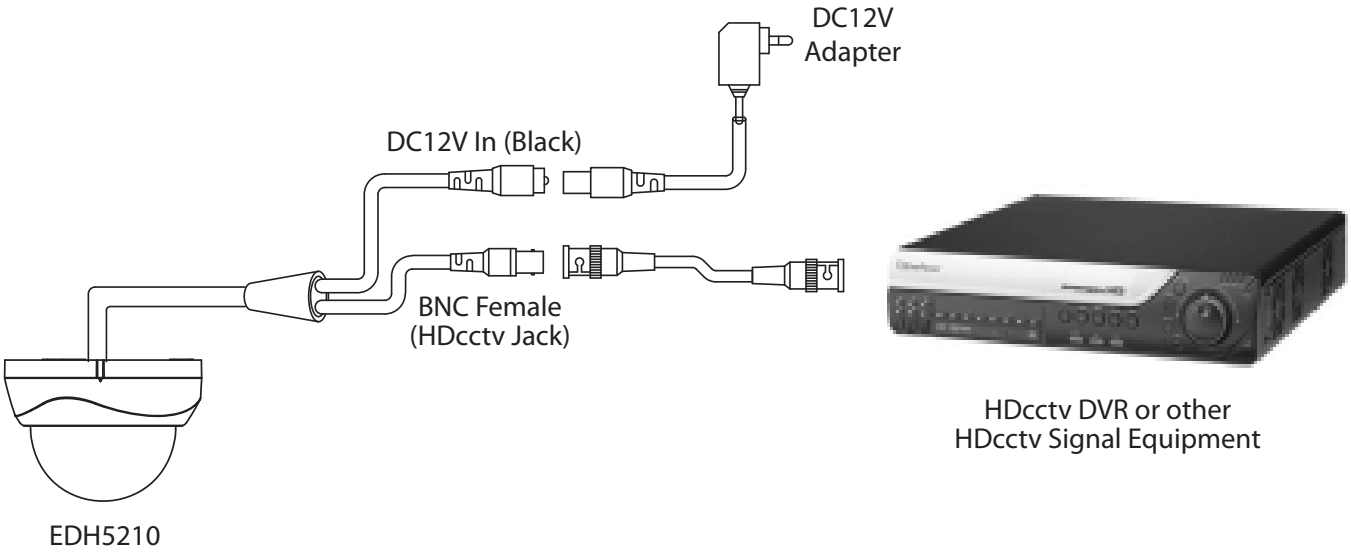
Chapter
3

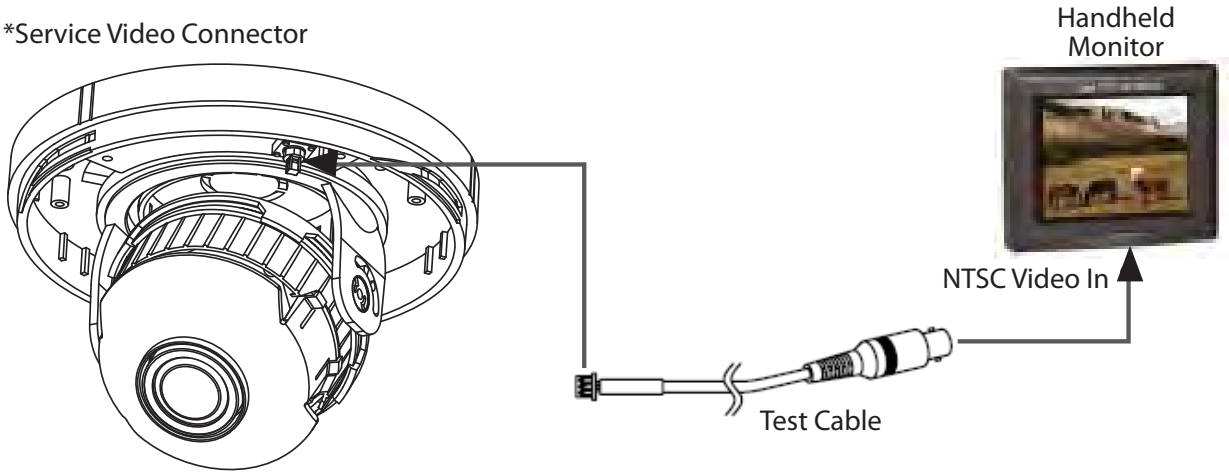
3. Installation



	PART NAME
1	Mounting Template
2	Base
3	Pan Adjust
4	Tilt Adjust
5	Rotate Adjust
6	Cover
7	Housing Cover
8	Dome Cover

Connections





* NOTE

When installing the camera, make sure that all cable ends and connectors are protected from humidity and other outdoor environments.

4. OSD Structure

SETUP
EXPOSURE
WHITE BALANCE
WDR / BLC
DNR
DAY & NIGHT
IMAGE
SPECIAL
SYSTEM
Reset Date All
EXT

Main	Sub Menu	Sub Menu		
EXPOSURE	BRIGHTNESS	0 ~ 20		
	AE MODE	NORMAL AE / INDOOR		
	LENS(IRIS)	MANUAL / AUTO		
	SHUTTER	MANUAL / AUTO	LEVEL	1/30(25), 1/60(50), 1/120(100), 1/240, 1/500, 1/1K, 1/2K, 1/4K, 1/8K, 1/16K, 1/30K, 1/60K.
			RETURN	BACK / EXIT
	DSS	OFF, X2, X3, X4, X5, X6, X7, X8		
	AGC	0 ~ 10		
	BASE FREQ	60Hz / 50Hz		
	RESET DATA	BACK / DEF.		
	RETURN	BACK / EXIT.		
WHITE BALANCE	WB MODE	AUTO /AUTOext / PUSH /MANUAL	COLORTEMP.	LOW / MIDDLE / HIGH
			R-GAIN	0 ~ 20
			B-GAIN	0 ~ 20
			RETURN	BACK / EXIT
	SATURATION	0 ~ 20		
	RESET DATE	BACK / DEF.		
	RETURN	BACK / EXIT.		
DWDR / BLC	MODE	OFF, BLC, DWDR		
	WDR WGT	0 ~ 4		
	BLC OSD	OFF ~ ON		
	BLC POS-X	0 ~ 20		
	BLC POS-Y	0 ~ 20		
	BLC SIZE-X	0 ~ 20		
	BLC SIZE-Y	0 ~ 20		
	RESET DATA	BACK / DEF.		
	RETURN	BACK / EXIT.		
DNR		OFF, LOW, MIDDLE, HIGH		
DAY & NIGHT		COLOR/B&W/ AUTO	D&N DETECT	AGC / SENSE
			DELAY	1sec, 3, 5, 10, 15, 20, 25, 30, 40, 50, 60sec
			D->N LEVEL	0 ~ 20(AGC) / 0 ~ 10(SENSE)
			N->D LEVEL	0 ~ 20(AGC) / 0 ~ 10(SENSE)
			RESET DATA	BACK / DEF.
			RETURN	BACK / EXIT.

4. OSD Structure

Main	Sub Menu	Sub Menu		
IMAGE	SHARPNESS	0 ~ 10		
	FLIP	OFF, H FLIP, V FLIP, HV FLIP		
	LENS SHADING	OFF, ON		
	DZOOM	1x, 2x, 4x, 6x, 8x, 10x, 12x, 14x, 16x, 18x, 20x		
	RESET DATA	BACK / DEF.		
	RETURN	BACK / EXIT.		
SPECIAL	PRIVACY	OFF/ ON	ZONE NO.	0 ~ 23
			ZONE OP.	OFF/ ON
			X-POS	0 ~ 60
			Y-POS	0 ~ 40
			X-SIZ	0 ~ 40
			Y-SIZ	0 ~ 40
			COLOR	BLK, WHI, YEL, CYN, GRN, MAG, RED, BLU
			TRANS.	0 ~ 4
			RESET DATA	BACK / DEF.
			RETURN	BACK / EXIT.
	HLMASK	OFF/ ON	LEVEL	0 ~ 20
			COLOR	BLK, WHI, YEL, CYN, GRN, MAG, RED, BLU
			RESET DATA	BACK / DEF.
			RETURN	BACK / EXIT.
	PATTERN	OFF, 1, 2		
	DISPLAY INFO.		CAMERA ID.	OFF/ ON
			MOTION CHECK	OFF/ ON
			RETURN	BACK / EXIT.
	RESET DATA	BACK / DEF.		
	RETURN	BACK / EXIT.		
SYSTEM	SDI FORMAT	1080p / 720p		
	SDI FPS	30 / 25 (when 1080p), 60 / 50 (when 720p)		
	CVBS FORMAT	NTSC / PAL		
	APPLY	OK		
	SYSTEM INFO	S/W VERSION		
		SET VERSION		
	RESET DATA	BACK / DEF.		
	RETURN	BACK / EXIT.		

EverFocus Electronics Corp.

EverFocus Taiwan:
12F, No.79, Sec. 1, Shin-Tai Wu Road,
Hsi-Chih, Taipei, Taiwan
TEL: +886 2 2698 2334
FAX: +886 2 2698 2380
www.everfocus.com.tw
marketing@everfocus.com.tw

EverFocus Europe - Germany:
Albert-Einstein-Strasse 1, D-46446
Emmerich, Germany
TEL: +49 2822 93940
FAX: +49 2822 939495
www.everfocus.de
info@everfocus.de

EverFocus China - Beijing:
Room 609, Technology Trade Building,
Shangdi Information Industry Base,
Haidian District, Beijing 100085, China
TEL: +86 10 6297 3336~39
FAX: +86 10 6297 1423
www.everfocus.com.cn
marketing@everfocus.com.cn

EverFocus China - Shenzhen:
4F, No. 2, D4 Building, Wan Yelong
Industrial Park, Tangtou Road, Shiyan,
Baoan, Shenzhen, Guangdong 518101, China
TEL: +86 755 2765 1313
FAX: +86 755 2765 0337
www.everfocus.com.cn
marketing@everfocus.com.cn

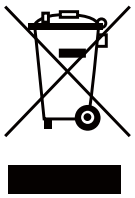
EverFocus USA - California:
1801 Highland Avenue, Unit A, Duarte, CA 91010, USA
TEL: +1 626 844 8888
FAX: +1 626 844 8838
www.everfocus.com
sales@everfocus.com

EverFocus USA - New York:
415 Oser Avenue, Unit S, Hauppauge, NY 11788, USA
TEL: +1 631 436 5070
FAX: +1 631 436 5027
www.everfocus.com
sales@everfocus.com

EverFocus Japan:
5F, Kinshicho City Building, 2-13-4 Koto-Bashi,Sumida-Ku,
Tokyo, 130-0022, Japan
TEL: +81 3 5625 8188
FAX: +81 3 5625 8189
www.everfocus.co.jp
info@everfocus.co.jp

EverFocus Europe - UK:
Unit 12, Spitfire Business Park,
Hawker Road, Croydon Surrey, CR0 4WD, UK
TEL: +44 (0) 20 8649 9757 / 0845 430 9999
FAX: +44 (0) 20 8649 9907
www.everfocus.com
salesuk@everfocus.com

EverFocus India:
Suite 803, Housefin Bhavan, C-21,
Bandra Kurla Complex, Bandra (East),
Mumbai 400051, India
TEL: +91 22 6128 8700
FAX: +91 22 6128 8705
www.everfocus.in
sales@everfocus.in



Your EverFocus product is designed and manufactured with high quality materials and components which can be recycled and reused.
This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste.
Please, dispose of this equipment at your local community waste collection/recycling centre.
In the European Union there are separate collection systems for used electrical and electronic product.
Please, help us to conserve the environment we live in!

Ihr EverFocus Produkt wurde entwickelt und hergestellt mit qualitativ hochwertigen Materialien und Komponenten, die recycelt und wieder verwendet werden können.
Dieses Symbol bedeutet, dass elektrische und elektronische Geräte am Ende ihrer Nutzungsdauer vom Hausmüll getrennt entsorgt werden sollen.
Bitte entsorgen Sie dieses Gerät bei Ihrer örtlichen kommunalen Sammelstelle oder im Recycling Centre.
Helfen Sie uns bitte, die Umwelt zu erhalten, in der wir leben!

EverFocus®